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Yoshitsugu Morita

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EXAMINER

KASSA, TIGABU

ART UNIT

PAPER NUMBER

1619

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/524,920	Applicant(s) MORITA ET AL.	
	Examiner TIGABU KASSA	Art Unit 1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed October 15, 2009. Claims 1-17 are pending. Claims 1-17 are under consideration in the instant office action. Receipt and consideration of Applicant's remarks/arguments submitted on 10/15/09 are acknowledged.

Maintained Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US patent 5,928,660, Issued on July 27, 1999) in view of Day (US Patent 5496959) and as evidenced by (Frederick C. Mish et al. Webster's ninth new collegiate dictionary, 1097, Meriam-Webster Inc., 9th edition, 1990) and Basic Silicon Production and Siloxane Polymerization from Dow Corning Corporation.

Applicant Claims

Applicant claims aqueous suspensions of cross-linked silicone particles comprising cross-linked silicone particles with an average particle size of from 0.5 to 500 μm , surfactant (N-acyl-, N-hydrocarbon taurines), and water. Furthermore, applicant claims the aqueous suspensions contain non-cross-linkable oil in the cross-linked silicone particles and % weight ranges for the three components of the aqueous suspensions. Additionally, applicant claims cosmetic raw materials comprising the aqueous suspensions and the aqueous emulsions, wherein in the aqueous suspensions the N-acyl-, N-hydrocarbon taurine is selected from the group of sodium N-lauroyl methyl taurine, sodium N-myristoyl methyl taurine.....). Instant claim 14 recites the aqueous suspensions according to claim 1 wherein component (B) is further defined as a salt of N-acyl-, N-hydrocarbon taurines formed by neutralizing the N-acyl-, N-hydrocarbon taurines with an alkaline substance. Instant claim 15 recites the aqueous suspensions according to claim 14 wherein the alkaline agent is selected from the list recited in the claim. Instant claim 16 recites the aqueous suspensions according to claim 4 wherein component (B) is further defined as a salt of N-acyl-, N-hydrocarbon taurines formed by neutralizing the N-acyl-, N-hydrocarbon

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taurines with an alkaline substance. Instant claim 17 recites the aqueous suspensions according to claim 16 wherein the alkaline agent is selected from the list recited in the claim. Instant claim 9 recites the aqueous suspensions according to claim 14 wherein the neutralizing agent is a taurine salt. Instant claim 10 recites the aqueous suspensions according to claim 9, wherein the taurine salt is selected from the list recited in the claim. Instant claim 12 recites the aqueous suspensions according to claim 16 wherein the neutralizing agent is a taurine salt. Instant claim 13 recites the aqueous suspensions according to claim 12, wherein the taurine salt is selected from the list recited in the claim.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Kobayashi et al. teach a raw material for cosmetic use comprising an aqueous suspension of a powdered silicon rubber (column 2, lines 14-16). The mean particle size of this powdered silicone rubber is in the range of 0.1 to 50 microns, and is preferably in the range of 0.5 to 50 (column 2, lines 17-20) and with particle size of 0.1 to 500 microns (see Abstract). Silicone rubber is “a rubber made from silicone elastomers and noted for its retention of flexibility, resilience, and tensile strength over a wide temperature range” as defined by (Frederick C. Mish et al. Webster’s ninth new collegiate dictionary, 1097, Meriam-Webster Inc., 9th edition, 1990). In basic silicone chemistry it is also known that silicone elastomers are cross-linked fluids whose three-dimensional structure is much more intricate than a gel (Basic Silicon Production and Siloxane Polymerization, Dow Corning Corporation). Hence, the powdered silicon rubber particles are cross-linked particles. Kobayashi et al. also discloses that in order to achieve a stable dispersion of these silicone rubber compositions as fine particles in water, it is desirable to

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use one or more nonionic, cationic, and/or anionic surfactants and also specifically mentions that “since these surfactants are mixed with the cosmetic “as is”, it is necessary to use surfactants that can be utilized as cosmetic raw materials.”

Kobayashi et al. teach that the **aqueous suspension of a powdered silicone rubber contains a non-cross-linked oil** (column 3, lines 24-28).

Kobayashi et al. teach that the **content of the powdered silicone rubber in the composition is in the range of 10 to 80 wt %, (column 5, lines 42-45), 50 parts by weight of water (column 7, lines 59-61), and surfactant in the range of 0.1 to 20 parts by weight (preferably 0.5 to 10 parts by weight) per 100 parts by weight of silicone rubber composition.**

Kobayashi et al. (US patent 5,928,660) also teach the three components of the aqueous suspension as discussed above while addressing instant claim 1. Additionally, Kobayashi et al. also teach that the suspension also contains non-cross-linked oil specifically being added in the silicon rubber powder particles as discussed above. Kobayashi et al. also specifically gives examples were **an aqueous emulsion of silicone rubber composition after the addition of the oil** (column 1, lines 60-61 and column 8, lines 61-65), which addresses the limitation of the aqueous emulsions of cross-linked silicone particles as recited in instant claim 4.

Kobayashi et al. also teach that the content of the non-cross-linked oil in the powdered silicone rubber is **80 wt % or less and a content of 50 wt% or less is especially desirable** (column 4, lines 56-63), 50 parts by weight of water (column 7, lines 59-61), and surfactant in the range of 0.1 to 20 parts by weight (preferably 0.5 to 10 parts by weight) per 100 parts by weight of silicone rubber composition. Kobayashi et al. teach **a cosmetic raw material which**

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allows the uniform dispersion of a powdered silicone rubber in a cosmetic containing the above discussed components including the aqueous emulsion.

*Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)*

Although Kobayashi et al. teach that in order to achieve a stable dispersion of these silicone rubber compositions as fine particles in water, **it is desirable to use one or more nonionic, cationic, and/or anionic surfactants**, Kobayashi et al. does not explicitly teach the N-acyl hydrocarbon taurines as surfactant. This deficiency is cured by the teachings of Day.

Day teaches the preparation **of N-acyl taurates by the direct condensation of carboxylic acids with taurate** (substituted 2-aminoalkane sulfonic acids and their alkali metal salts) derivatives (column 1, lines 6-10). **The products made are useful as wetting agents, cleansing agents, and dispersants and may be used in a wide variety of products for detergent and personal care uses such as shampoos, lotions, bubble baths, and toilet soaps** (column 1, lines 10-14 and column 4, lines 33-35).

With regard to claims 14-17 and dependant claims 9-10 and 12-13, the claims are product-by-process claims. Applicant is claiming the salt of the N-acyl-, hydrocarbon taurine incorporated in aqueous composition formed by neutralization of N-acyl- hydrocarbon taurine with an alkaline substance. Applicant has resorted to using the product-by-process format. Since the end product, which is the salt form of the N-acyl-, hydrocarbon taurine is exactly the same product as the N-acyl taurates and their alkali metal salts described by Day, they are rendered *prima facie* obvious. This is because even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The

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patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

***Finding of Prima Facie Obviousness Rationale and Motivation
(MPEP §2142-2143)***

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to modify the composition of Kobayashi et al. by incorporating N-acyl-, N-hydrocarbon taurines in the composition as a surfactant, because Day teaches the use of N-acyl-N-hydrocarbon taurines as surface stabilizing agents (surfactants). An ordinary skilled artisan would have been motivated to add N-acyl- N-hydrocarbon taurines as surface stabilizing agents, because Day teaches that N-acyl taurates are useful as wetting agents, cleansing agents, and dispersants and may be used in a wide variety of products for detergent and personal care uses such as shampoos, lotions, bubble baths, and toilet soaps (column 1, lines 10-14 and column 4, lines 33-35). Furthermore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to substitute one surfactant type with the other for the same intended use, namely, stabilization of the cosmetic composition. One of ordinary skill in the art at the time of the instant application was filed would have had a reasonable expectation of success upon combining the teachings of Kobayashi et al. and Day, because both references teach cosmetic compositions. In light of the forgoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to arguments

Applicants' arguments filed 10/15/09 have been fully considered but they are not persuasive. *Applicants asserted that the Dow Corning website relied upon by the Examiner was not published until April 27, 2003, as evidenced by Archive.org. Notably, the subject application has a claim of priority to JP 2002-253540, which was filed on August 30, 2002.* The examiner respectfully disagrees with applicants' assertion because this hyperlink is used solely to define the commonly known features of silicone elastomer such as property of crosslinking. In basic silicone chemistry silicone elastomers are **cross-linked fluids** whose three-dimensional structure is much more intricate than a gel. To establish this common knowledge the date of publication for the evidentiary reference does not have to be before the effective filing date of the priority document. The examiner reminds applicants that the definition of a silicone elastomer should remain the same before and after the filing date of the priority document absent of evidence to the contrary. The rejection is based on the teachings of Kobayashi et al. in view of Day. The other two references are evidentiary references solely to verify an already known fact.

Applicants also argue that even if Kobayashi et al. teach numerous surfactant types notably, the N-acyl, N-hydrocarbon taurine claimed in the subject application is not among the suitable surfactants disclosed, and there is no reason whatsoever for one of skill in the art to predict that the claimed N-acyl, N-hydrocarbon taurine claimed in the subject application can be utilized as a cosmetic raw material, as required for the surfactants of the Kobayashi et al.

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Applicants also asserted that the Applicants note the distinction between being suitable for use in a cosmetic composition and being suitable as a cosmetic material, which are clearly not one in the same. For example, water is suitable for use in cosmetic composition, but is clearly not a cosmetic material itself. Based on the requirements set forth in the Kobayashi et al. relating to the selection of the surfactant as well as the extensive list of suitable surfactants disclosed, there is no reason whatsoever for one of skill in the art to disregard the teachings and requirements of Kobayashi et al. and incorporate a different surfactant, such as an N-acyl, N-hydrocarbon taurine, in the composition disclosed in Kobayashi et al. The examiner respectfully disagrees with applicants assertions because when the rejection is based on the combination teachings of Kobayashi et al. in view of Day applicants are resorting to attacking the references individually especially Kobayashi et al. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner puts on the record also applicants' arguments do not make any sense at all because Kobayashi et al. clearly teach the incorporation of surfactants in order to achieve a stable dispersion of these silicone rubber compositions as fine particles in water, it is desirable to use one or more nonionic, cationic, and/or anionic surfactants. However, Kobayashi et al. do not teach in the list of surfactants the N-acyl hydrocarbon taurines. It is for this reason that the examiner brought Day. Day clearly remedied this deficiency by teaching the preparation of N-acyl taurates by the direct condensation of carboxylic acids with taurate (substituted 2-aminoalkane sulfonic acids and their alkali metal salts) derivatives (column 1, lines 6-10) and by

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stating that the N-acyl taurates made are useful as wetting agents, cleansing agents, and dispersants and may be used in a wide variety of products for detergent and personal care uses such as shampoos, lotions, bubble baths, and toilet soaps (column 1, lines 10-14 and column 4, lines 33-35). It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to substitute anionic surfactant taught by Kobayashi et al. with the N-acyl taurates by Day because they are functionally equivalent. The examiner is clearly aware of the judicial standards behind equivalency and applied them properly. In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958). Day clearly recognizes that N-acyl taurates are useful as wetting agents, cleansing agents, and dispersants and may be used in a wide variety of products for detergent and personal care uses such as shampoos, lotions, bubble baths, and toilet soaps (column 1, lines 10-14 and column 4, lines 33-35). Furthermore, the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). One of ordinary skill in the art at the time of the instant application was filed would have had a reasonable expectation of success upon combining the teachings of Kobayashi et al. and Day, because Kobayashi et al. teach cosmetic compositions that contain anionic surfactants and Day teach the preparation of N-acyl taurates which are useful as wetting agents, cleansing agents, and dispersants and may be used in a wide variety of products for detergent and

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personal care uses such as shampoos, lotions, bubble baths, and toilet soaps (column 1, lines 10-14 and column 4, lines 33-35).

*Applicants also argue that the results obtained in the subject invention are unexpected. Applicants also assert that specifically, Table 3 of the subject application sets forth physical properties of Practical Examples 1 and 2 and Comparative Examples 3 and 4. Practical Examples 1 and 2 of the subject application included an N-acyl, N-hydrocarbon taurine. Conversely, Comparative Examples 3 and 4 of the subject application included surfactants other than N-acyl, N-hydrocarbon taurine (sodium lauryl sulfate and sodium polyoxyethylene (2) lauryl sulfate, respectively). Furthermore, Applicants assert that these anionic surfactants are within the surfactants disclosed by Kobayashi et al. As set forth in Table 3 in the subject application, Practical Examples 1 and 2, which included the claimed N-acyl, N-hydrocarbon taurine, had excellent physical properties. Conversely, Comparative Examples 3 and 4 of the subject application, which did not include the claimed N-acyl, n-hydrocarbon taurine, but rather other common anionic surfactants, had undesirable physical properties. The examiner respectfully disagrees with applicants' assertions because applicants really did not compare their formulation with the formulation of the closest prior art. The examiner reminds applicants that given the fact that in addition to the surfactants other ingredients are incorporated in the composition of Kobayashi et al. it is not logical to deduce such a conclusion without really comparing the compositions in a controlled condition. Applicants did not really compare any of Kobayashi et al. compositions to their compositions. Additionally, the examiner also takes the position that applicants' comparative data is purely subjective not substantiated with a sound scientific data. Applicant relying upon comparative showing to rebut *prima facie* case must*

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compare his claimed invention with closest prior art *In re Holladay*, 584 F.2d 384, 199 USPQ 516 (CCPA 1978); Ex parte Humber, 217 USPQ 265 (Bd. App. 1961). Additionally, applicant who neither established nor asserted that teachings of two closest prior art references are so parallel to one another that testing against one would show relative effectiveness of claimed invention over other, did not provide adequate basis to rebut conclusion of obviousness *In re Johnson*, 747 F.2d 1456, 1461, 223 USPQ 1260, 1264 (Fed. Cir. 1984).

Applicants have not demonstrated how their product is patentably distinct from the cited prior arts nor do the claims as currently written distinguish the instant invention over the prior arts. In light of the forgoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

Claims 1-17 are pending and are rejected. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIGABU KASSA whose telephone number is (571)270-5867. The examiner can normally be reached on 9 am-5 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne P. Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tigabu Kassa

02/19/10

/YVONNE L. EYLER/***Supervisory Patent Examiner, Art Unit 1619***